Overview

What is the measles?

Measles is caused by a virus. Measles is an extremely contagious, vaccine-preventable disease. The measles, mumps and rubella (MMR) vaccine is highly effective at preventing transmission of measles. One dose of MMR vaccine is approximately 93% effective at preventing measles. Two doses are approximately 97% effective.

How does measles spread?

Measles is spread from person to person through the air by infectious droplets and is considered highly contagious.

What are the symptoms?

Symptoms include fever, runny nose, cough, loss of appetite, conjunctivitis, and a rash. The rash usually lasts 5–6 days and begins at the hairline, moves to the face and upper neck, and proceeds down the body.

How long does it take to show signs of measles after being exposed?

It takes an average of 10-12 days from exposure to the first symptom, which is usually fever. The measles rash doesn't usually appear until approximately 14 days after exposure, 2-3 days after the fever begins.

How serious is measles?

Measles can be a serious disease, with 30% of reported cases experiencing one or more complications. Death from measles occurs in 2 to 3 per 1,000 reported cases in the United States. Complications from measles are more common among very young children (younger than 5 years) and adults (older than 20 years). Some people who become sick with measles also get an ear infection, diarrhea, or a serious lung infection, such as pneumonia. Although severe cases are rare, measles can cause swelling of the brain and even death. Measles can be especially severe in infants and in people who are malnourished or who have weakened immune systems (such as from HIV infection or cancer or from certain drugs or therapies).

What are potential complications of measles?

Diarrhea and ear infections are common complications of measles. More severe complications may also occur. As many as one out of every 20 children with measles gets pneumonia, the most common cause of death from measles in young children. About one child out of every 1,000 who get measles will develop encephalitis (swelling of the brain) that can lead to convulsions and can leave the child deaf or with intellectual disability. For every 1,000 children who get measles, one or two will die from it. Measles may cause pregnant woman to give birth prematurely or have a low-birth-weight baby.

How many people are affected by measles?

Before the measles vaccination program started in 1963, an estimated 3 to 4 million people got measles each year in the United States. Of these, approximately 500,000 cases were reported each year to CDC; of these, 400 to 500 died, 48,000 were hospitalized, and 1,000 developed encephalitis (brain swelling).
from measles. Since then, widespread use of measles vaccine has led to a greater than 99% reduction in measles cases compared with the pre-vaccine era. However, measles is still common in other countries. Unvaccinated people continue to get measles while abroad and bring the disease into the United States and spread it to others.

How long can a person spread measles to others?

Measles is highly contagious and can be transmitted from four days before the rash becomes visible to four days after the rash appears.

What should be done if someone is exposed to measles?

Notification of the exposure should be communicated to a healthcare provider and the local health department. If the person has not been vaccinated, measles vaccine (MMR) may prevent disease if given within 72 hours of exposure. Immune globulin (a blood product containing antibodies to the measles virus) may prevent or lessen the severity of measles if given within six days of exposure.

Prevention and Treatment

What is a measles vaccine?

Measles can be prevented with MMR vaccine. The vaccine protects against three diseases: measles, mumps, and rubella. CDC recommends children get two doses of MMR vaccine, starting with the first dose at 12 through 15 months of age, and the second dose at 4 through 6 years of age. Teens and adults should also be up to date on their MMR vaccination.

The MMR vaccine is very safe and effective. Two doses of MMR vaccine are about 97% effective at preventing measles; one dose is about 93% effective.

Who should get the vaccine?

All students and school staff born in or after 1957 who cannot provide adequate evidence of immunity should be vaccinated unless there is a valid contraindication. Exposed persons receiving their second MMR dose and previously unvaccinated persons receiving their first dose as part of the outbreak control program may be immediately readmitted to school or work. These individuals, however, should be monitored for signs and symptoms of measles.

Individuals with laboratory confirmation of past infection or blood tests showing immunity to measles, mumps, and rubella do not require MMR vaccine. For those without such documentation, it is recommended that students (or parents of minor students) be contacted and advised to obtain vaccine if there is not a medical contraindication. For more information, click here.

Who should not get the vaccine?

The Centers for Disease Control indicates there are populations who should not get the vaccine or who should wait.

Tell your vaccine provider if the person getting the vaccine:
• Has any severe, life-threatening allergies. A person who has ever had a life-threatening allergic reaction after a dose of MMR vaccine, or has a severe allergy to any part of this vaccine, may be advised not to be vaccinated. Ask your health care provider if you want information about vaccine components.

• Is pregnant, or thinks she might be pregnant. Pregnant women should wait to get MMR vaccine until after they are no longer pregnant. Women should avoid getting pregnant for at least 1 month after getting MMR vaccine.

• Has a weakened immune system due to disease (such as cancer or HIV/AIDS) or medical treatments (such as radiation, immunotherapy, steroids, or chemotherapy).

• Has a parent, brother, or sister with a history of immune system problems.

• Has ever had a condition that makes them bruise or bleed easily.

• Has recently had a blood transfusion or received other blood products. You might be advised to postpone MMR vaccination for 3 months or more.

• Has tuberculosis.

• Has gotten any other vaccines in the past 4 weeks. Live vaccines given too close together might not work as well.

• Is not feeling well. A mild illness, such as a cold, is usually not a reason to postpone a vaccination. Someone who is moderately or severely ill should probably wait. Your doctor can advise you.

Who does not need the vaccine?

You do not need measles, mumps, and rubella (MMR) vaccine if you meet any of these criteria for evidence of immunity:

• You have written documentation of adequate vaccination:
  
  o at least one dose of a measles, mumps, and rubella virus-containing vaccine administered on or after the first birthday for preschool-age children and adults not at high risk for exposure and transmission

  o two doses of measles and mumps virus-containing vaccine for school-age children and adults at high risk for exposure and transmission, including college students, healthcare personnel, international travelers, and groups at increased risk during outbreaks

• You have laboratory confirmation of past infection or had blood tests that show you are immune to measles, mumps, and rubella.

• You were born before 1957.*

If you do not have evidence of immunity against measles, mumps, and rubella, talk with your doctor about getting vaccinated. If you’re unsure whether you’ve been vaccinated, you should first try to find your vaccination records. If you do not have written documentation of MMR vaccine, you should get vaccinated. The MMR vaccine is safe, and there is no harm in getting another dose if you may already be immune to measles, mumps, or rubella.
If you received a measles vaccine in the 1960s, you may not need to be revaccinated. People who have documentation of receiving LIVE measles vaccine in the 1960s do not need to be revaccinated. People who were vaccinated prior to 1968 with either inactivated (killed) measles vaccine or measles vaccine of unknown type should be revaccinated with at least one dose of live attenuated measles vaccine. This recommendation is intended to protect those who may have received killed measles vaccine, which was available in 1963-1967 and was not effective.

**How can students get the measles vaccine?**

MMR vaccines are available through the Athens County Health Department if insurance covers the vaccine. It is also available at Campus Care; call 740-592-7100 to schedule an appointment.

**How else can I reduce my chances of becoming ill?**

Take steps to prevent illness, such as frequent hand-washing with soap and water or a hand sanitizer containing at least 60% alcohol. Don’t touch your eyes, nose or mouth. If you need to touch your face, ensure your hands are clean. Cover your mouth and nose with a tissue or your sleeve (not your hands) when coughing or sneezing. Try to avoid close contact, such as kissing, hugging or sharing eating utensils or cups, with people who are sick.

**What should I do if I get sick?**

Talk to your doctor or nurse if you feel seriously ill, especially if you have a fever. Avoid contact with other people while you are sick.

**How can I make sure I don’t infect someone else?**

Avoid contact with other people while you are sick.

**Student Resources**

I live on campus. What should I do if I get sick?

Talk to your doctor or nurse if you feel seriously ill, especially if you have a fever. Avoid contact with other people while you are sick.

**Where can I get a measles vaccine?**

MMR vaccines are available through the Athens County Health Department if insurance covers the vaccine. It is also available at Campus Care; call 740-592-7100 to schedule an appointment.

**I believe I got measles. When can I return to class?**

Those with suspected measles should be excluded from school or work until four days have passed since rash onset (they can return on the fifth day after the day of rash onset) if not immunocompromised.

Notification of the exposure should be communicated to a healthcare provider and the local health department. If the person has not been vaccinated, measles vaccine (MMR) may prevent disease if given within 72 hours of exposure. Immune globulin (a blood product containing antibodies to the measles virus) may prevent or lessen the severity of measles if given within six days of exposure.

**Does the student health insurance plan cover the measles vaccine?**
The student health insurance policy covers 100% of the MMR vaccine if administered by a network provider.

**Faculty/Staff Resources**

I have an employee who is ill and has come to work. I’m concerned they may have the measles and will expose others to the virus. Can I send the employee home?

Yes. You can send an employee home who is exhibiting any measles symptoms or who has been exposed to the measles. But prior to taking this action, please consult with Human Resources. While each case must be considered separately, employees with a fever greater than 100 degrees Fahrenheit and a cough should be sent home. Other symptoms of concern are coughing and sneezing.

Can I come to work if I have symptoms of the measles?

Talk to your doctor or nurse if you feel seriously ill, especially if you have a fever. Avoid contact with other people while you are sick.

If I am absent from work because of the measles, when can I return to work?

Those with suspected measles should be excluded from school or work until four days have passed since rash onset (they can return on the fifth day after the day of rash onset) if not immunocompromised.

Do the University’s health plans cover measles vaccines?

Yes. The measles vaccine is covered 100% by Anthem and Express Scripts for employees and dependents enrolled in one of the University’s faculty and staff health plans.

What are my options for obtaining a measles vaccine?

Vaccines should be available at your family physician’s office. Vaccines may also be available through a pharmacy. You should contact your family physician or pharmacy to verify vaccine availability.

**Additional Resources**

**Regional/National Resources:**

- [CENTERS FOR DISEASE CONTROL*](#)
- [THE OHIO DEPARTMENT OF HEALTH*](#)
- [OHIO UNIVERSITY PANDEMIC INFLUENZA RESPONSE PLAN](#)
- [ATHENS COUNTY HEALTH DEPARTMENT*](#)
- [BELMONT COUNTY HEALTH DEPARTMENT*](#)
- [FAIRFIELD DEPARTMENT OF HEALTH*](#)
• LAWRENCE COUNTY HEALTH DEPARTMENT*
• ROSS COUNTY HEALTH DISTRICT*
• ZANESVILLE CAMPUS H1N1 INFORMATION*
• ZANESVILLE-MUSKINGUM COUNTY HEALTH DEPARTMENT*

*Following this link takes you outside Ohio University's website.